

MICHIGAN DEPARTMENT OF CIVIL SERVICE
JOB SPECIFICATION
PUBLIC UTILITIES ENGINEER

JOB DESCRIPTION

Employees in this job function as professional public utilities engineers, completing or overseeing a variety of professional engineering activities directed towards analyzing utility rate structures, natural gas production, transmission and storage, and operational safety standards and practices.

There are four classifications in this job.

Position Code Title – Public Utilities Engineer-E

Public Utilities Engineer 9

This is the entry level. As a trainee, the employee carries out a range of professional public utilities engineering assignments while learning the methods of the work.

Public Utilities Engineer 10

This is the intermediate level. The employee carries out an expanding range of professional public utilities engineering assignments in a developing capacity.

Public Utilities Engineer P11

This is the experienced level. The employee performs a full range of professional public utilities engineer assignments in a full functioning capacity. Considerable independent judgement is used to make decisions in carrying out assignments that have significant impact on services or programs. Guidelines may be available, but require adaptation or interpretation to determine appropriate courses of action.

Position Code Title – Public Utilities Engineer-A

Public Utilities Engineer 12

This is the advanced level. The employee may function as a lead worker or senior worker. At this level, employees are responsible for overseeing the work assignments of other professionals or have regular assignments that have been recognized by Civil Service as having significantly greater complexity than those assigned at the experienced level in the series.

JOB DUTIES

NOTE: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Participates in field and office work to assure the uniformity, reliability, adequacy and safety of utility services.

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Carries out field inspections related to the enforcement of Public Service Commission rules and regulations on the quality and safety of utility services.

Prepares and evaluates data on valuation, depreciation and depletion of public utilities, including preparation of staff positions, settlement discussions, expert testimony and subsequent orders.

Conducts field inspections of electric and communication facilities to determine compliance with Public Service Commission wire crossing and line extension permits, underground and overhead facility rules, and electric construction and maintenance regulations.

Conducts field inspections related to the enforcement of Public Service Commission rules and regulations on the production and transmission of natural gas.

Prepares and evaluates reservoir and geological engineering studies on natural gas reservoirs and storage fields.

Performs inspections of gas and electric meters and testing facilities; conducts office reviews and audits of meter accuracy statistics.

Studies energy supply and demand information and recommends alternative ways of influencing demand.

Provides expert testimony before rate hearings and other formal proceedings and attends Public Service Commission cases.

Analyzes and investigates customer service complaints; recommends appropriate action for resolution.

Develops data for engineering and operational studies involving Public Service Commission cases.

Researches technical reports, long-range planning studies and other data to obtain information and make recommendations.

Cooperates with the staffs of federal and state agencies on issues of mutual concern.

Maintains records and prepares reports and correspondence related to the work.

May perform related essential functions appropriate to the class and other non-essential functions as required.

Additional Job Duties

Public Utilities Engineer 12 (Lead Worker)

Oversees the work of professional staff by making and reviewing work assignments, establishing priorities, coordinating activities, and resolving related work problems.

Public Utilities Engineer 12 (Senior Worker)

Performs on a regular basis professional public utilities engineer assignments which are recognized by Civil Service as more complex than those assigned at the experienced level.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Some knowledge in the area listed is required at the entry level, developing knowledge is necessary at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of the principles and practices of public utility engineering and rate design.

Knowledge of basic practices in the maintenance, operation and administration of utility companies.

Knowledge of the principles of electricity, mechanics, hydraulics and structures.

Knowledge of cost, service lives, cost of removal and operating characteristics of modern utility companies.

Knowledge of standards of service for utility companies.

Knowledge of safety principles related to utility companies.

Knowledge of technical and administrative factors in utility rate regulation.

Knowledge of legal requirements related to the determination of utility rates.

Skill in the use of technical and engineering instruments and tools.

Ability to read and interpret engineering plans, data and specifications.

Ability to conduct investigations and determine facts concerning complaints related to utility services.

Ability to prepare graphs, curves, tables, and engineering drawings.

Ability to set work priorities.

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Ability to serve as an expert witness.

Ability to maintain records, and prepare reports and correspondence related to the work.

Ability to communicate effectively with others.

Ability to maintain favorable public relations.

Additional Knowledge, Skills, and Abilities

Public Utilities Engineer 12 (Lead Worker)

Ability to organize and coordinate the work of others.

Ability to set priorities and assign work to other professionals.

Working Conditions

Some jobs require travel.

Some jobs work in an office and outside.

Physical Requirements

None.

Education

Possession of a bachelor's of science degree in engineering.

Experience

Public Utilities Engineer 9

No specific amount or type is required.

Public Utilities Engineer 10

One year of professional experience in public utilities engineering involving the analysis of utility rate structures, operations and safety standards and practices, equivalent to a Public Utilities Engineer 9.

Public Utilities Engineer P11

Two years of professional experience in public utilities engineering involving the analysis of utility rate structures, operations and safety standards and practices, equivalent to a Public Utilities Engineer in state service, including one year equivalent to an Public Utilities Engineer 10.

Public Utilities Engineer 12

Three years of professional experience in public utilities engineering involving the analysis of utility rate structures, operations and safety standards and practices, including one year of experience equivalent to a Public Utilities Engineer P11.

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Special Requirements, Licenses, and Certifications

None.

NOTE: Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

<u>Job Code</u>	<u>Job Code Description</u>
PUBUTLENG	Public Utilities Engineer

<u>Position Title</u>	<u>Position Code</u>	<u>Pay Schedule</u>
Public Utilities Engineer-E	PUTENGE	H21-008
Public Utilities Engineer-A	PUTENGA	H21-013

ECP Group 2
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